

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A transformer comprising:

a plurality of parallel metal lines; and

a magnetic material provided about the plurality of parallel metal lines, the magnetic material including a structure to reduce Eddy currents flowing in the magnetic material, the structure including a plurality of parallel slots provided in the magnetic material, the plurality of parallel slots extending substantially perpendicular to the plurality of parallel metal lines.

2-3. (Canceled)

4. (Previously Presented) The transformer of claim 1, wherein the structure further includes a laminated magnetic structure that includes layers of magnetic material and insulation material.

5. (Original) The transformer of claim 4, wherein the insulation material comprises one of an oxide and a nitride.

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6. (Previously Presented) The transformer of claim 4, wherein the insulation material comprises one of a cobalt oxide, a cobalt nitride and a cobalt oxynitride.

7. (Previously Presented) The transformer of claim 4, wherein the magnetic material is chosen from the group consisting of amorphous CoZrTa, CoFeHfO, CoAlO, FeSiO, CoFeAlO, CoNbTa, CoZr, and other amorphous cobalt alloys.

8. (Currently Amended) The transformer of claim 1, further comprising insulative material formed between the plurality of parallel metal lines and the magnetic material.

9-29. (Canceled)

30. (Currently Amended) The transformer of claim 1, wherein the plurality of parallel metal lines and the magnetic material are provided on a die.

31. (Currently Amended) A transformer comprising:
a plurality of parallel metal lines of the transformer; and
a magnetic material provided about the plurality of parallel metal lines, the magnetic material including a structure to reduce Eddy currents flowing in the magnetic material, the structure including a laminated magnetic structure having layers of magnetic material and insulation material.

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32. (Previously Presented) The transformer of claim 31, wherein the insulation material comprises one of an oxide and a nitride.

33. (Previously Presented) The transformer of claim 31, wherein the insulation material comprises one of a cobalt oxide, a cobalt nitride and a cobalt oxynitride.

34. (Previously Presented) The transformer of claim 31, wherein the magnetic material is chosen from the group consisting of amorphous CoZrTa, CoFeHfO, CoAlO, FeSiO, CoFeAlO, CoNbTa, CoZr, and other amorphous cobalt alloys.

35. (Currently Amended) The transformer of claim 31, wherein the structure to reduce Eddy currents further includes a plurality of parallel slots provided in the magnetic material.

36. (Currently Amended) The transformer of claim 35, wherein the parallel slots extend substantially perpendicular to the plurality of parallel metal lines.

37. (Currently Amended) The transformer of claim 31, wherein the plurality of parallel metal lines and the magnetic material are provided on a die.

38-43. (Canceled)

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44. (Currently Amended) The transformer of claim 1, wherein the plurality of parallel metal lines extend along a first direction and the slots extend along a second direction, the second direction being substantially perpendicular to the first direction.

45. (New) The transformer of claim 1, further comprising insulation material provided in the plurality of parallel slots.

46. (New) The transformer of claim 1, further comprising insulating material to insulate each of the parallel metal lines from one another.

47. (New) The transformer of claim 46, wherein the insulating material further insulates the parallel metal lines from the magnetic material.

48. (New) The transformer of claim 1, wherein the parallel slots are formed on a top and a bottom of the magnetic material.

49. (New) The transformer of claim 48, wherein the parallel slots are further formed on a side of the magnetic material.

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50. (New) The transformer of claim 1, wherein the plurality of parallel metal lines extend from a first end to a second end, the metal lines at the first end coupled together and the metal lines at the second end coupled together.

51. (New) The transformer of claim 1, wherein the plurality of parallel metal lines extend from a first end to a second end, the metal lines at the first end coupled together and the metal lines at the second end coupled together to increase coupling coefficient and material inductance.

52. (New) A transformer comprising:

a plurality of metal lines of the transformer formed substantially parallel to each other;

insulative material to surround the plurality of metal lines;

magnetic material to surround the plurality of metal lines; and

a plurality of slots formed on the magnetic material, the slots formed substantially perpendicular to the plurality of metal lines of the transformer.

53. (New) The transformer of claim 52, further comprising insulation material provided in the plurality of slots.

54. (New) The transformer of claim 52, wherein the plurality of metal lines extend from a first end to a second end of the transformer, the metal lines at the first end coupled together and the metal lines at the second end coupled together.

55. (New) The transformer of claim 52, wherein the slots to reduce Eddy currents in the magnetic material.